

science, public health, chemistry, microbiology, or any appropriate agricultural, biological, or physical science. Alternately, they may have 4 years of specialized experience in inspectional, investigational, technical support, or other work that provided a fundamental understanding of environmental health principles, methods, and techniques equivalent to that which would have been gained through a 4-year college curriculum or some combination of education and experience as described above. In most States, they are licensed by examining boards.

All inspectors and compliance officers are trained in the applicable laws or inspection procedures through some combination of classroom and on-the-job training. In general, people who want to enter this occupation should be responsible and like detailed work. Inspectors and compliance officers should be able to communicate well.

Federal Government inspectors and compliance officers whose job performance is satisfactory advance through their career ladder to a specified full-performance level. For positions above this level, usually supervisory positions, advancement is competitive and based on agency needs and individual merit. Advancement opportunities in State and local governments and the private sector are often similar to those in the Federal Government.

### Job Outlook

Average growth in employment of inspectors and compliance officers is expected through 2008, reflecting a balance of continuing public demand for a safe environment and quality products against the desire for smaller government and fewer regulations. Additional job openings will arise from the need to replace those who transfer to other occupations, retire, or leave the labor force for other reasons. In private industry, employment growth will reflect industry growth and the continuing self-enforcement of government and company regulations and policies, particularly among franchise operations in various industries.

Employment of inspectors and compliance officers is seldom affected by general economic fluctuations. Federal, State, and local governments, which employ four-fifths of all inspectors, provide considerable job security.

### Earnings

The median annual salary of inspectors and compliance officers, except construction, was \$36,820 in 1998. The middle half earned between \$28,540 and \$48,670. The lowest 10 percent earned less than \$22,750, while the highest 10 percent earned over \$72,280. Inspectors and compliance officers employed by local governments had earnings of \$31,800 in 1997; those who worked for State governments earned a median annual salary of \$33,700; and those in the Federal Government earned \$39,900.

In the Federal Government, the annual starting salaries for inspectors varied from \$25,500 to \$31,200 in 1999, depending on the nature of the inspection or compliance activity. Beginning salaries were slightly higher in selected areas where the prevailing local pay level was higher. The following presents average salaries for selected inspectors and compliance officers in the Federal Government in nonsupervisory, supervisory, and managerial positions in early 1999.

Air safety investigators .....	\$68,900
Highway safety inspectors .....	68,100
Aviation safety inspectors .....	65,100
Railroad safety inspectors .....	60,500
Mine safety and health inspectors .....	58,000
Environmental protection specialists .....	58,000
Equal employment opportunity officials .....	57,900
Safety and occupational health managers .....	54,000
Public health quarantine inspectors .....	52,500
Quality assurance inspectors .....	50,600
Securities compliance examiners .....	43,300
Park ranger .....	42,100
Agricultural commodity graders .....	41,600
Consumer safety inspectors .....	37,300
Food inspectors .....	35,200
Environmental protection assistants .....	31,600

Most inspectors and compliance officers work for Federal, State, and local governments or in large private firms, most of which generally offer more generous benefits than do smaller firms.

### Related Occupations

Inspectors and compliance officers ensure that laws and regulations are obeyed. Others who enforce laws and regulations include construction and building inspectors; fire marshals; Federal, State, and local law enforcement professionals; correctional officers; and fish and game wardens.

### Sources of Additional Information

Information on obtaining a job with the Federal Government is available from the Office of Personnel Management through a telephone-based system. Consult a telephone directory under U.S. Government for a local number or call (912) 757-3000; TDD (912) 744-2299. The number is not tollfree and charges may result. Information also is available from their Internet site: <http://www.usajobs.opm.gov>

Information about jobs in Federal, State, and local government as well as in private industry is available from the State Employment Service.

## Insurance Underwriters

(O\*NET 21102)

### Significant Points

- Employment is projected to grow more slowly than average as insurance companies increasingly use “smart” underwriting software systems that automatically analyze and rate insurance applications.
- Most large insurance companies prefer college graduates who have a degree in business administration, finance, or related fields and possess excellent communications and problem-solving skills.

### Nature of the Work

Insurance companies protect individuals and organizations from financial loss by assuming billions of dollars in risks each year. Underwriters are needed to identify and calculate the risk of loss from policyholders, establish appropriate premium rates, and write policies that cover these risks. An insurance company may lose business to competitors if the underwriter appraises risks too conservatively, or it may have to pay more claims if the underwriting actions are too liberal.



*Underwriters determine premium rates for insurance policies.*

With the aid of computers, underwriters analyze information in insurance applications to determine if a risk is acceptable and will not result in a loss. Applications are often supplemented with reports from loss-control consultants, medical reports, and actuarial studies. Underwriters then must decide whether to issue the policy and the appropriate premium to charge. In making this determination, underwriters serve as the main link between the insurance carrier and the insurance agent. On occasion, they accompany sales agents to make presentations to prospective clients.

Technology plays an important role in an underwriter's job. Underwriters use computer applications called "smart systems" to manage risks more efficiently and accurately. These systems automatically analyze and rate insurance applications, recommending acceptance or denial of the risk, and adjusting the premium rate in accordance with the risk. With these systems, underwriters are better equipped to make sound decisions and avoid excessive losses.

Most underwriters specialize in one of three major categories of insurance—life, health, or property and casualty. Life and health insurance underwriters may further specialize in group or individual policies. The increased complexity of insurance plans and attention to the "bottom line" is changing the nature of underwriting. In the past, insurance agents acting as underwriters, particularly in the life and health fields, could accept or reject applications. Now this underwriting role is done mostly by full-time underwriters in the home or field office of the insurance company.

Property and casualty underwriters usually specialize in commercial or personal lines and then often by type of risk insured, such as fire, homeowners, automobile, marine, liability, or workers' compensation. In cases where casualty companies provide insurance through a single "package" policy, covering various types of risks, the underwriter must be familiar with different lines of insurance. For business insurance, the underwriter often must be able to evaluate the firm's entire operation in appraising its application for insurance.

An increasing proportion of insurance sales, particularly in life and health insurance, is being made through group contracts. A standard group policy insures everyone in a specified group through a single contract at a standard premium rate. The group underwriter analyzes the overall composition of the group to assure that the total risk is not excessive. Another type of group policy provides members of a group—a labor union, for example—with individual policies reflecting their needs. These usually are casualty policies, such as those covering automobiles. The casualty underwriter analyzes the application of each group member and makes individual appraisals. Some group underwriters meet with union or employer representatives to discuss the types of policies available to their group.

**Working Conditions**

Underwriters have desk jobs that require no unusual physical activity. Their offices usually are comfortable and pleasant. Although underwriters typically work a standard 40-hour week, more are working longer hours due to the downsizing of many insurance companies. Most underwriters are based in a home office, but they occasionally attend meetings away from home for several days. Construction and marine underwriters frequently travel to inspect work sites and assess risks.

**Employment**

Insurance underwriters held about 97,000 jobs in 1998. The following tabulation shows the percent distribution of employment by industry:

Property and casualty insurance carriers .....	34
Insurance agents, brokers, and services .....	31
Life insurance carriers .....	16
Medical service and health insurance carriers .....	6
Pension funds and miscellaneous insurance carriers .....	5
Other industries .....	8

The majority of underwriters work for insurance companies called "carriers." Of these underwriters, most work for property and casualty

insurance carriers, and secondly for life insurance carriers. Most of the remaining underwriters work in insurance agencies or for organizations that offer insurance services to insurance companies and policyholders. A small number of underwriters work in agencies owned and operated by banks, mortgage companies, and real estate firms.

Most underwriters are based in the insurance company's home office, but some, mostly in the property and casualty area, work out of regional branch offices of the insurance company. These underwriters usually have the authority to underwrite risks and determine an appropriate rating without consulting the home office.

**Training, Other Qualifications, and Advancement**

For entry level underwriting jobs, most large insurance companies prefer college graduates who have a degree in business administration or finance, with courses or experience in accounting. However, a bachelor's degree in almost any field—plus courses in business law and accounting—provides a good general background and may be sufficient to qualify. Computer knowledge is essential.

New employees usually start as underwriter trainees or assistant underwriters. They may help collect information on applicants and evaluate routine applications under the supervision of an experienced risk analyst. Property and casualty trainees study claim files to become familiar with factors associated with certain types of losses. Many larger insurers offer work-study training programs, lasting from a few months to a year. As trainees gain experience, they are assigned policy applications that are more complex and cover greater risks. These require the use of computers for more efficient analysis and processing.

Continuing education is necessary for advancement. Insurance companies usually pay tuition for underwriting courses that their trainees successfully complete; some also offer salary incentives. Independent study programs for experienced property and casualty underwriters are also available. The Insurance Institute of America offers a program called "Introduction to Underwriting" for beginning underwriters, and the specialty designation, AU, or Associate in Underwriting, the second formal step in developing a career in underwriting. To earn the AU designation, underwriters complete a series of courses and examinations that generally last 2 years.

The American Institute for Chartered Property Casualty Underwriters awards the designation, CPCU, or Chartered Property and Casualty Underwriter, the third and final stage of development for an underwriter. Earning the more advanced CPCU designation takes about 5 years, and requires passing 10 examinations covering personal and commercial insurance, risk management, business and insurance law, accounting, finance, management, economics, and ethics. Although CPCU's may be underwriters, the CPCU is intended for everyone working in all aspects of property and casualty insurance. The American College offers the Chartered Life Underwriter (CLU) designation and the Registered Health Underwriter (RHU) designation for all professionals working in the fields of life and health insurance.

Underwriting can be a satisfying career for people who enjoy analyzing information and paying attention to detail. In addition, underwriters must possess good judgment in order to make sound decisions. Excellent communication and interpersonal skills are also essential, as much of their work involves dealing with agents and other insurance professionals.

Experienced underwriters who complete courses of study may advance to senior underwriter or underwriting manager positions. Some underwriting managers are promoted to senior managerial jobs. At some carriers, a master's degree is needed to achieve this level. Other underwriters are attracted to the earnings potential of sales and therefore obtain State licenses to sell insurance and insurance products as agents or brokers.

**Job Outlook**

Employment of underwriters is expected to increase more slowly than the average for all occupations through 2008. Computer-assisted software that helps underwriters analyze policy applications more quickly and accurately has made underwriters more productive and capable of

taking on a greater workload. Mergers and acquisitions of insurance companies are also expected to continue to result in more downsizing of insurance carriers. Most job openings will result from the need to replace underwriters who transfer or leave the occupation, although several new job openings are being created for underwriters in the area of product development. These underwriters help set the premiums for new insurance products, such as in the growing field of long-term care insurance.

The best job prospects will be for underwriters with the right skills and credentials, such as excellent computer and communication skills, coupled with a background in finance. Job prospects may be better in health insurance than in property and casualty and life insurance. As Federal and State laws require health insurers to accept more applicants for insurance, the number of policies sold will increase. Also, as the population ages, there will be a greater need for health and long-term care insurance.

Because insurance is considered a necessity for people and businesses, there will always be a need for underwriters. It is a profession that is less subject to recession and layoffs than other fields. Underwriters who specialize, though, may have difficulty transferring to another underwriting specialty if downsizing were to occur.

### Earnings

Median annual earnings of insurance underwriters were \$38,710 in 1998. The middle 50 percent earned between \$29,790 and \$51,460 a year. The lowest 10 percent earned less than \$23,750; while the top 10 percent earned over \$77,430. Median annual earnings in the industries employing the largest number of insurance underwriters in 1997 were:

Medical service and health insurance .....	\$40,000
Life insurance .....	39,800
Fire, marine, and casualty insurance .....	39,100
Insurance agents, brokers, and service .....	32,200

Insurance companies usually provide better than average benefits, including employer-financed group life, health, and retirement plans.

### Related Occupations

Underwriters make decisions on the basis of financial data. Other workers with the same type of responsibility include auditors, budget analysts, financial advisers, loan officers, credit managers, real estate appraisers, and risk managers.

### Sources of Additional Information

Information about a career as an insurance underwriter is available from the home offices of many life insurance and property-liability insurance companies. Information about careers in the property-casualty insurance field can be obtained by contacting:

• The Insurance Information Institute, 110 William St., New York, NY 10038. Internet: <http://www.iii.org>

Information on the underwriting function, in particular, and the CPCU and AU designation can be obtained from:

• The American Institute for Chartered Property and Casualty Underwriters, and the Insurance Institute of America, 720 Providence Rd., P.O. Box 3016, Malvern, PA 19355-0716. Internet: <http://www.aicpcu.org>

## Loan Officers and Counselors

(O\*NET 21108)

### Significant Points

- Loan officer positions generally require a bachelor's degree in finance, economics, or a related field; training or experience in banking, lending, or sales is advantageous.



*Loan officers obtain financial information from clients.*

- Low interest rates will keep demand for loans high, causing employment of loan officers to grow about as fast as average; growth will be tempered by technology that makes these employees more productive.

### Nature of the Work

For many individuals, taking out a loan may be the only way to afford a house, car, or college education. Likewise for businesses, loans are essential to start many companies, purchase inventory, or invest in capital equipment. *Loan officers* facilitate this lending by seeking potential clients and assisting them in applying for loans. Loan officers also gather information about clients and businesses to ensure that an informed decision is made regarding the quality of the loan and the probability of repayment.

Loan officers usually specialize in commercial, consumer, or mortgage loans. Commercial or business loans help companies pay for new equipment or expand operations; consumer loans include home equity, automobile, and personal loans; and mortgage loans are made to purchase real estate or to refinance an existing mortgage. In addition, banks and other lenders are offering a growing variety of loans. Loan officers must keep abreast of new types of loans and other financial products and services, so they can meet their customers' needs.

In many instances, loan officers act as salespeople. Commercial loan officers, for example, contact firms to determine the firms' demand for loans. If the firm is seeking new funds, the loan officer will try to persuade the company to obtain the loan from their institution. Similarly, mortgage loan officers develop relationships with commercial and residential real estate agencies, so when an individual or firm buys a property, the real estate agent might recommend contacting that loan officer for financing.

Once this initial contact has been made, loan officers guide clients through the process of applying for a loan. This process begins with a formal meeting or telephone call with a prospective client, during which the loan officer obtains basic information about the purpose of the loan and explains the different types of loans and credit terms that are available to the applicant. Sometimes, the loan officer assists the client in filling out the application and answers questions about the process.

After completing the forms, the loan officer begins the process of analyzing and verifying the application to determine the client's creditworthiness. The loan officer may request a copy of the client's credit history from one of the major credit reporting agencies, or in the case of commercial loans, she or he may request copies of the company's financial statements. Loan officers include this information and their written comments in a loan file, used to analyze the viability of the loan vis-à-vis the lending institution's requirements. At this point, the loan officer, in consultation with her or his manager, decides whether